

AMENDMENTS TO THE CLAIMS:

Please cancel claim 15 without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A universal mandrel comprising:

a core mandrel having an outside diameter;

at least one a plurality of adapter sleeves each having an inside diameter sized to engage the core mandrel outside diameter, the plurality of adapter sleeves comprising varying exterior dimensions; and

an interlocking mechanism secured between the core mandrel and ~~the at least a~~ selected one of the adapter sleeves, the interlocking mechanism preventing the ~~at least one~~ selected adapter sleeve from rotating relative to the core mandrel.

2. (Original) A universal mandrel according to claim 1, wherein the interlocking mechanism comprises a lug formed on either the outside diameter of the core mandrel or the inside diameter of the adapter sleeve, and a slot formed in the other of the outside diameter of the core mandrel or the inside diameter of the adapter sleeve, the lug engaging the slot when the adapter sleeve is fitted to the core mandrel.

3. (Original) A universal mandrel according to claim 2, wherein the lug is formed on the inside diameter of the adapter sleeve, and wherein the slot is formed in the outside diameter of the core mandrel.

4. (Currently Amended) A universal mandrel ~~according to claim 1~~ comprising:

a core mandrel having an outside diameter;

at least one adapter sleeve having an inside diameter sized to engage the core mandrel

outside diameter; and

an interlocking mechanism secured between the core mandrel and the at least one adapter sleeve, the interlocking mechanism preventing the at least one adapter sleeve from rotating relative to the core mandrel, wherein the interlocking mechanism comprises a flange formed on one edge of the adapter sleeve, the flange having an opening therein, and a connector sized to fit in the opening and secure the flange to an axial face of the core mandrel.

5. (Original) A universal mandrel according to claim 4, wherein the connector comprises a pin or a bolt.

6. (Original) A universal mandrel according to claim 1, wherein the adapter sleeve is structurally configured to serve as an interface connection with another metallic component.

7. (Original) A universal mandrel according to claim 1, wherein the adapter sleeve is structurally configured to serve as an intermediate expansion rate medium to buffer a thermal mismatch between a composite component and an interfaced metallic component.

8. (Currently Amended) A universal mandrel according to claim ~~14~~, comprising a plurality of adapter sleeves of varying exterior dimensions.

9. (Original) A universal mandrel according to claim 1, wherein the adapter sleeve is constructed of tool steel.

10. (Currently Amended) A universal mandrel comprising:

a core mandrel having an outside diameter;

~~at least one~~ a plurality of adapter sleeves ~~sleeves each~~ having an inside diameter sized to engage the core mandrel outside diameter, the plurality of adapter sleeves comprising varying exterior dimensions; and

an interlocking mechanism secured between the core mandrel and ~~the at least a selected~~
one of the adapter ~~sleeves~~sleeves, the interlocking mechanism preventing the ~~at least one~~selected
adapter sleeve from rotating relative to the core mandrel,

wherein a thermal expansion rate of the adapter ~~sleeves~~sleeves is lower than that of the
core mandrel.

11. (Original) A universal mandrel according to claim 10, wherein the interlocking
mechanism comprises a lug formed on either the outside diameter of the core mandrel or the
inside diameter of the adapter sleeve, and a slot formed in the other of the outside diameter of the
core mandrel or the inside diameter of the adapter sleeve, the lug engaging the slot when the
adapter sleeve is fitted to the core mandrel.

12. (Original) A universal mandrel according to claim 11, wherein the lug is formed on
the inside diameter of the adapter sleeve, and wherein the slot is formed in the outside diameter
of the core mandrel.

13. (Original) A universal mandrel according to claim 10, wherein the interlocking
mechanism comprises a flange formed on one edge of the adapter sleeve, the flange having an
opening therein, and a connector sized to fit in the opening and secure the flange to an axial face
of the core mandrel.

14. (Original) A universal mandrel according to claim 13, wherein the connector
comprises a pin or a bolt.

15. (Canceled)

16. (Original) A universal mandrel according to claim 10, wherein the adapter sleeve is
constructed of tool steel.